Published in final edited form as:

Surgery. 2015 November ; 158(5): 1389–1394.

Looking beyond the crystal ball: An ethical dilemma in advance directive implementation in multidisciplinary patient care

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CASE SCENARIO

A 75-year-old man with early-stage prostate cancer presents to the emergency department for recent progressive shortness of breath, peripheral edema, and fatigue. Diagnostic measures are undertaken, and symptomatic therapy is initiated with good response. On arrival to the ward, the patient presents an advance directive to the admitting team that states he does not wish to have cardiopulmonary resuscitation (CPR) performed under any circumstance. He states that he “has lived a good life” and that he “would never want to need life support”; until now, the patient has enjoyed a physically active lifestyle and has always been very involved in his family and community. The patient’s wishes are documented accordingly in the electronic medical record. He is diagnosed subsequently with new-onset congestive heart failure, and echocardiography shows severe aortic valve stenosis and mildly impaired left ventricular ejection fraction at 40%; additionally, a coronary angiogram shows 90% occlusion of the left anterior descending artery. As the patient’s symptoms resolve on medical therapy, the cardiac surgery team is consulted regarding definitive treatment. The surgeons feel as though operative management with valvular replacement and a coronary artery bypass graft is a viable option that may improve the patient’s long-term survival, and after discussion of the risks and benefits of the procedure, the patient consents to undergo the operation without delay.

No obvious discussion regarding modification of the advance directive is evident from the medical record, and the directive is not modified further when addressing the perioperative period. The planned operation is completed without complications, and the patient’s recovery proceeds well. On postoperative day 3, because of a hospital bed shortage in the cardiac surgery intensive care unit, he is considered sufficiently stable on clinical evaluation to be transferred to the medical intensive care unit, although the cardiac surgery service will remain his primary team. That evening, the patient complains of sudden light-headedness and chest discomfort, and an electrocardiogram rhythm strip demonstrates ventricular tachycardia. Over the course of a few minutes, the patient loses consciousness, and his blood pressure deteriorates quickly. The cardiac monitor continues to show ventricular tachycardia.

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Disclosures of Significant Relationships with Relevant Commercial Companies/Organizations: The authors, editors, and planning committee members report no conflicts of interest.

The internal medicine resident on service in the intensive care unit notes the patient's advance directive and "do not resuscitate" request during rapid review of the chart and must decide what treatment, if any, to provide.

THE ETHICAL DILEMMA

The patient has noted explicitly his refusal of aggressive treatments in the event of cardiac arrest or other conditions that would require cardiopulmonary resuscitation; however, arrhythmias occur commonly in the postoperative setting, especially in the context of the patient's open-heart procedure and are potentially recoverable with rapid intervention. The internal medicine resident who has only just met the patient must now choose between withholding treatment and attempting possible life-saving actions. This situation presents an ethical dilemma in that a physician who does not have an in-depth understanding of the patient's motivations is faced with previously recorded preferences that may have been made with minimal knowledge of potential outcomes; consequently, the physician must then find a balance between upholding patient autonomy and reacting to unpredictable clinical events. Four possible responses exist in this situation:

1. Withhold any aggressive resuscitation efforts (eg, cardiopulmonary resuscitation [CPR], intubation).
2. Begin CPR immediately and perform electrocardioversion.
3. Call the primary service (cardiac surgery) for emergent consultation.
4. Attempt to reach the patient's family or a surrogate decision maker.

BACKGROUND

During the last century, modern medicine has undergone countless drastic changes, both in the understanding of disease and in the delivery of health care. Across every medical specialty, major advances in treatment and in research have had a profound impact on improving patient care and extending quality of life, reflected directly by the increasing average age of the population in both developed and developing countries. The number of older persons (age 60 and older) is predicted to exceed the young for the first time in history by the year 2050.¹ This change has already begun to have a formidable effect on multiple aspects of society, ranging from economic to social to political. The swiftly progressing capabilities of medical technology to treat disease and to sustain life have sparked substantial ethical debate.

At the forefront of the discussion, advance care planning represents a balance between a growing need for end-of-life decision-making and the emphasis in medicine on patient autonomy. Since the passage of the Patient Self-Determination Act in 1990, health care providers receiving Medicare or Medicaid funding are required to provide patients with information regarding their rights to participate in and to direct health care decisions affecting their treatment, namely their right to accept or refuse treatment, their right to formulate an advance directive, and any institutional policies under existing state law regarding advance directives and treatment measures. As a result, the use of advance

directives has become more common, though it remains underutilized, especially in the surgical setting.^{2,3}

The most familiar advance directives are a living will or a durable power of attorney. In a living will, a formal written record is created that generally relates a patient's wishes regarding life-sustaining interventions should the patient lose immediate decision-making capacity; in a durable power of attorney, a surrogate decision-maker is designated who may act on the patient's behalf if the patient is unable to choose for himself. Much debate, however, has surrounded the effectiveness of advance directives concerning their accessibility, their utility, and particularly their consistency. Controversy arises often between decisions made by surrogates and the wishes of the patient as well as between the patient's own values and his understanding of the actual effects of the advance directive.² Despite legislation promoting the formation of advance directives, several studies have shown no substantive increases in the actual implementation of advance care documents in health care settings.⁴ Furthermore, although there has been an increase in the proportion of patients who have been involved in some kind of advance care planning, either in declaring preferences in a formal document or in engaging in general discussion of end-of-life issues, this increased awareness has not translated into substantial or sustained changes in patient care or increased documentation.^{5,6}

Although advance directives may serve arguably as the most direct attempt to maximize patient autonomy, to predict every situation or potential medical intervention would be impossible, and as a result, advance directives are often still vague and require difficult decisions to be made by surrogates, family members, and physicians.² In the majority of situations, the patient does not have the medical experience or background to realize the extent of possible outcomes or complications from a given operation and must rely on a proactive approach by the physician to make an informed decision regarding any advance directive statements. During the last 20 years, the Physician Orders for Life-Sustaining Treatment (POLST) program has gained increasing momentum as a palliative care tool that helps to facilitate a candid discussion between health care providers and patients. Transferable between different care settings, the POLST program involves standardized forms containing not only the traditional code status but also additional sections discussing antibiotic treatment and artificial nutrition. Now used in some form by 43 states, the POLST program has been shown to be effective in early studies, and both health care providers and patients report that treatment preferences are honored in the majority of situations when POLST is in place.⁷

Supporting this more dynamic patient–physician interaction, professional guidelines set by the American Society of Anesthesiologists advocate for clear communication among all involved parties, defining this upfront communication as an essential element of preoperative preparation and perioperative care.⁸ Similarly, the American College of Surgeons recommends “required reconsideration” of previous advance directives, though no mention is made of procedure- or goal-directed care or the duration of the applicable perioperative period. With the growing impact of advance directives on clinical practice, the position statement of the American College of Surgeons denounces policies that lead to either automatic enforcement or cancellation of do-not-resuscitate orders, emphasizing the gross

infringement on a patient's right to self-determination that such policies represent.⁹ No specific mechanism is defined for lifting, modifying, or replacing an advance directive, and although the ultimate purpose of these guidelines is to promote detailed discussion between physician and patient, this ambiguity continues to place a heavy responsibility on individual physician judgment.

DISCUSSION

Option 1: Withhold any aggressive resuscitation efforts

As is evident in the current scenario, a major ethical quandary involves the distinction between the autonomy of the patient versus that of the physician in determining the extent of an advance care directive. To follow the patient's advance directive as written would respect a decision made on an individual and very personal level and one that the patient has considered to great enough extent to create an advance directive. Additionally, to deny him accordance with his stated wishes would undermine the fundamental right of the patient to self-determination and risk the immeasurable potential for unacceptable consequences. After cardiac surgery, although cardio-respiratory arrest is rare, survival to hospital discharge may range from 30 to 80% and generally carries a poor prognosis with possible prolonged ventilatory requirement, increased morbidity of additional surgical procedures, or worsened functional status.¹⁰⁻¹² The patient, however, has never had a similar experience in which this set of circumstances and risk has occurred, resulting in an arguably uninformed decision to refuse lifesaving therapies. Thus, in the chaotic immediacy of sudden clinical deterioration, the care team is left to make a difficult decision for the patient with limited information, a situation encountered all too often in the postoperative setting.

Withholding care also highlights the implications of beneficence, nonmaleficence, and justice between different teams caring for the patient. An unavoidable aspect of modern health care expressed in this case involves the limited availability of medical resources, including intensive care unit beds, which can be another frequent source of discord when patients are managed by multiple teams. In opposing corners, the responsibility of the intensivists to the welfare of all patients under their care, an ethic developed to maximize "the greatest good for the greatest number," comes into direct conflict with the principle of the surgeon of the no-holds-barred, no-cost-spared focus on his individual patient.¹³ A regular occurrence across health care settings, the patient in this case was moved to a nonsurgical unit because of his status as the "least sick," and although he remained in an intensive care situation, his care changed from one predominantly dictated by a surgical philosophy to one in which a more general perspective on the patient's previously stated wishes would likely prevail. Further complicating this scenario, the intensive care unit team now responsible for the immediate care of the patient is less familiar with the patient's history, his informed wishes, and his goals of care, which may change in the setting of a operative procedure, placing the patient in a position of increased vulnerability.

Option 2: Begin CPR immediately and perform electrocardioversion

By performing CPR and electrocardioversion in a timely fashion, the patient might be resuscitated quickly and have an otherwise uncomplicated postoperative course. As noted,

study results regarding survival to hospital discharge and long-term prognosis range widely, and although controversial, some data have shown CPR in postoperative cardiac patients to be effective in terms of cost and quality of life, even for elderly patients who may have otherwise worse outcomes given their age and associated comorbidities.¹² Also, though protocol was followed in entering the patient's advance directive into the medical record, no discussion had been pursued regarding modification of this directive specifically for the operation or during postoperative care. This lack of communication, both directly with the patient and between the surgical and medical teams ultimately results in the life-determining conflict between a physician's intrinsic drive to preserve life and the patient's autonomy. The patient's directive had not been addressed in regards to his goals of care or whether he would be amenable to particular procedures should the need arise, if there was a reasonable chance for recovery, or if the event was a possible postoperative complication, which in this patient's case may have been resolved with limited intervention.

A recent study examined the use of advance directives specifically in high-risk or inoperable aortic stenosis at a large academic center. Despite the efforts of greater than a decade, the authors found that only 47% of 251 patients had an advance directive prepared at the time of hospital admission, and only a third of these addressed life-prolonging treatments.¹⁴ This uncertainty of patient wishes serves to demonstrate several factors which are critical to clear communication in considering advance directives yet were still points of breakdown in.

Option 3: Call the primary service (cardiac surgery) for emergent consultation

In the event of impending cardiac arrest, the medical intensive care team may not have enough time to contact the primary surgical team for recommendations. This scenario addresses a central theme in the perspectives held by different medical specialties regarding advance directives. Extensively studied in the intensive care setting, a critical finding relates to the discrete and sometimes divergent value systems held by surgeons and intensivists and the potential for conflict and miscommunication, especially when difficult decisions need to be made with patients and family members.¹³

Among operative disciplines, the issue of advance directives is perhaps the most highly controversial, and the influence of advance directives specifically in the perioperative setting has only recently come under greater scrutiny.^{13,15-17} Chiefly in acute or emergent situations, in elective procedures, and in intensive care at the end of life, an ethical dilemma surrounding advance directives arises frequently, and this may partially extend from a unique set of goals and values found commonly among surgeons. Characterized as a surgical imperative "to do everything possible," studies suggest that social, personal, and professional reasons underlie this overwhelming drive of surgeons to sustain their patients through an operation and its associated recovery process, regardless of difficulty or duration.^{13,18} At odds with this approach of many surgeons are sometimes the stated wishes of an advance directive, and it is this paradox that becomes a major struggle between surgery and advance care planning.

For the majority of surgeons, the relationship with patients has been described as a "covenantal ethic," one in which a strong personal commitment to the patient is held by the individual surgeon, for better or for worse: as voiced by some, "[f]or surgeons, the choice is

simple: life or death. Examining the quality of that saved life is beside the point. If the patient has a chance at living, it is wrong, even immoral, to deprive them of that chance.”¹³ Simply by virtue of the invasive nature of the profession, the principle of “first, do no harm” must adapt: in order to do good, the patient must come to some controlled level of “harm.” In combination with the surgeon’s instinctive commitment to take complete responsibility for life and limb of his or her patient, this interpretation then may conceivably be modified even further to “first, do not let the patient die,” a sense of deep, individual obligation that serves as an intrinsic part of the surgical ethos.¹⁶ Distinguished as the phenomenon of “surgical buy-in,” the relationship between surgeons and their patients is rooted deeply in an implicit contract, one that illustrates the surgeon’s sense of personal accountability for operative outcomes and one that can make withholding or withdrawing care very difficult. Compounding the dilemma of advance directives can also be the discrepancy between the surgeon’s perspective and the patient’s understanding of what a procedural consent entails or what it may mean to the surgeon.^{17, 19}

Option 4: Attempt to reach the patient’s family or a surrogate decision maker

Similar to Option 3, in an emergent situation, there is often too little time to seek additional consultation, either from another physician team, the ethics committee of the hospital, or from the patient’s family. The patient’s family may also have little information regarding the patient’s medical history or post-operative course, forcing them to make a rapid, uncertain decision without the opportunity to consider multiple contributing factors. In this situation, any surrogate decision maker would be unable to discuss the patient’s care with both the intensive care and the surgical teams, and this lack of information only adds to the urgency and overall emotional distress.

Insufficient communication at multiple levels contributes to the ethical dilemma involved in this patient’s management, and this uncertainty extends directly to the administrative level in the implementation of hospital policy. Although the patient did present an advance directive, the discussion crucial to appropriate management and a clear patient–physician relationship did not appear to occur based on the medical record, and although no single reason can be ascribed to this lack of dialogue, perhaps the system in general may be at greatest fault. At many institutions such as ours (Washington University School of Medicine), inquiry regarding advance directives is not made routinely until the patient has already been admitted, and no formal documentation is required stating that any discussion of pre-existing advance directives has occurred. Translated into common practice, this limited regulation and enforcement of policy undermines greatly the purpose of advance directives in giving patients a voice in their right to determining their own medical care. Constant emphasis and institutional commitment will be necessary in providing physicians with a standard guideline for appropriate communication regarding advance directives with patients, family members, and other health care professionals.

ETHICAL CONCEPTS

In the postoperative management of patients with advance directives, multiple dynamics contribute to a complex and often-unclear system that can impact the decisions of medical treatment and communication between physicians, patients, and families:

1. A fundamental cultural paradigm often associated with surgery and its effect on interactions or conflict with other medical specialties, especially regarding goals of care.
2. The appropriate allocation of medical and intensive care unit resources.
3. The growing necessity of team hand-offs or sign-outs with difficulties in communication and the inherent consequence of loss of information.
4. The overall implementation of advance directives in institutional policies.

ETHICS BOTTOM LINE

Since their advent, advance directives have sought to achieve the goal of preserving the patient's right to self-determination at any time he or she is unable or lacks immediate capacity to state his or her wishes for medical treatment. Ideally, an advance directive also affords physicians and health care providers the ability to uphold the ethical precepts of beneficence and nonmaleficence in situations in which they may come into conflict with potentially futile care. The system of implementation of advance directives, however, can be imperfect and requires a consistent avenue for dialogue between physicians and patients. This critical foundation often is compromised because of time constraints, lack of documentation, involvement of multiple physicians or medical teams, physician naiveté, or minimal institutional emphasis on advance directives. Particularly for surgical patients, serious discussion before any procedure about the perioperative period is vital in determining appropriate clarification or modification of a pre-existing advance directive given the inherent risk of morbidity and mortality in surgery. This discussion may require temporary modifications in any existing health care directive, must then translate into actual practice, and must work within a structure fluid enough to permit changes that may arise based on day-to-day or even hour-to-hour alterations in clinical status.

As advancements in medicine continue both to extend life and to improve quality of life, important consequences of this progress must be considered. The increases in the need for management of chronic diseases and the increasing age of the global population have highlighted the necessity for advance care planning, and the debate centers on the very tenets of medical ethics and the inevitable effects of cultural paradigms held within different medical specialties. This key issue of different ethical philosophies and goals among medical professionals emphasizes the need for clear communication in the care of postoperative patients.

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Advance Directive Implementation: CME objectives

The learning objectives provided by this ethical challenge deal with the postoperative management of patients with advance directives and the multiple dynamics that contribute to a complex and often unclear system that can significantly impact medical and surgical treatment decisions and satisfactory communication between physicians, patients, and families. These include understanding the ethical principles involved in (1) A fundamental cultural paradigm often associated with surgery and its effect on interactions or conflict with other medical specialties, especially regarding goals of care; (2) The appropriate allocation of medical and intensive care unit resources; (3) The growing necessity of team hand-offs with the inherent consequences of loss of information; and (4) The overall implementation of advance directives in accordance with institutional policies.